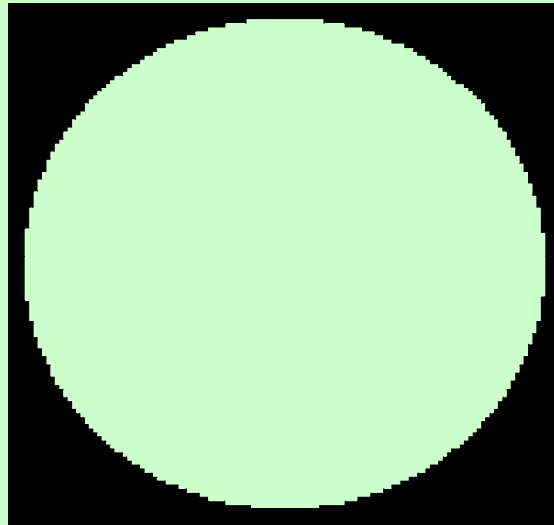


The 2002 SPCC Rule



U. S. EPA
Region 6



2002 SPCC Rule



Publication Date: July 17, 2002



Effective Date: August 16, 2002





The 2002 SPCC Rule



New format



New sections for different types of facilities and new subparts for different types of oils (petroleum and other oils, animal fats and vegetable oils).



Incorporates the use of plain language.





The 2002 SPCC Rule



“Should to shall to must.”



Clarification that the rule’s requirements
are **mandatory**.





Applicability

General Applicability 112.1:

Applies to any owner or operator of a non-transportation related facility engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using or consuming oil or oil products.

Clarifies includes “**using oil**” (i.e. oil filled electrical and other equipment).



Applicability

General Applicability 112.1:

Regulatory threshold:

Raises the threshold by eliminating the **660 gallon/single** container criterion.

Now total capacity >1,320 gallons

Minimum container size:

Exempts containers less than **55 gallons** from capacity calculation.



Applicability



General Applicability 112.1:



Facilities which may reasonably be expected to discharge oil to navigable waters or adjoining shorelines of the United States;



May affect natural resources belong to, appertaining to, or under the exclusive management authority of the U.S.;



Into or upon waters of the contiguous zone...



Exemptions in the Rule

The rule exempts completely buried tanks that are subject to and meet **all technical requirements** of the Underground Storage Tank rules (40 CFR part 280 or 281).



Exemptions in the Rule

A facility, or part, used **exclusively** for wastewater treatment and not used for any other requirement of 40 CFR Part 112.

The production, recovery, or recycling of oil is **not** wastewater treatment.



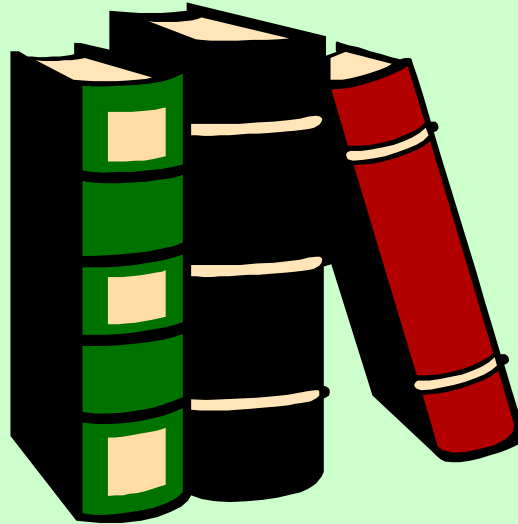
Otherwise Exempt Facilities



(f) Regional Administrators have authority to require preparation of an SPCC Plan for otherwise exempt facilities on a case-by-case basis.



112.2 DEFINITIONS



New and Expanded Definitions



Definitions in the Rule



Facility:

Any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and waste treatment, or in which oil is used...



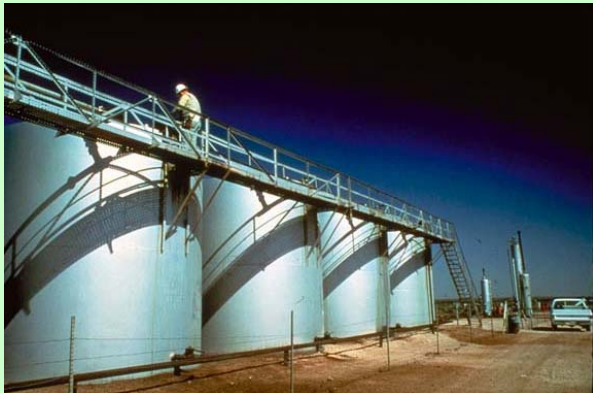
(may be as small as a piece of equipment or as large as a oil field or a military base)





Onshore Facility

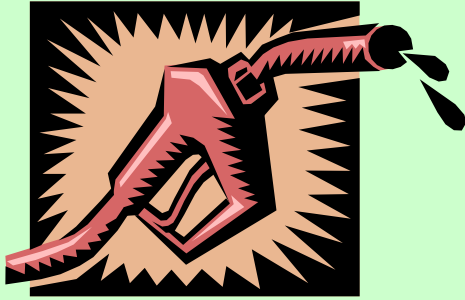
Any facility of any kind located in, on, or under any land within the United States, other than submerged lands.



Complex Facility



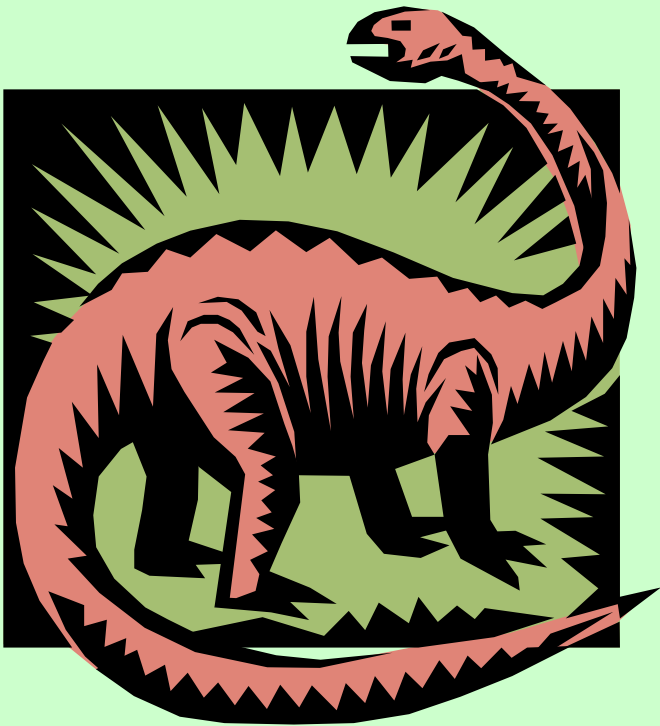
A facility possessing a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of the CWA.



Oil

Oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

Petroleum Oil



Petroleum in any form, including but not limited to crude oil, fuel oil, mineral oil, sludge, oil refuse, and refined products, such as gasoline and jet fuel.

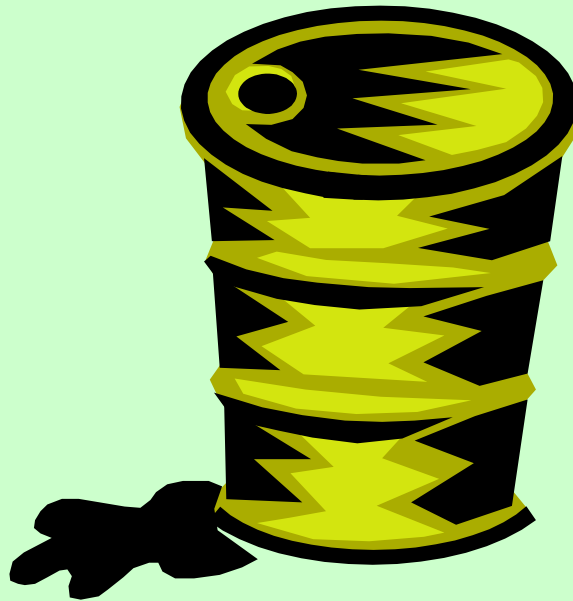
Non-Petroleum Oil

Oil of any kind that is not petroleum-based, including but not limited to: fats, oils, and greases of animal, fish, or marine mammal origin; And vegetable oils, including oils from seeds, nuts, fruits, and kernels.



Storage capacity

The **shell capacity** of the container.





Discharge

- Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under Section 402 of the CWA;





Navigable Waters



Defined in definitions section at 112.2





Wetlands

Those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas, wet meadows, prairie river overflows, and natural ponds.



Bulk Storage Container:



Any container used to store oil.

Bunkered Tanks, Completely Buried Tanks, Partially Buried Tanks are considered above ground tanks.

Oil filled electrical, manufacturing or operational equipment not included in the definition. Therefore, they are not subject to the bulk storage requirements of the rule (containment, testing, and fail safe engineering)

Completely Buried Tank

- Any container completely below grade and covered with earth, sand, gravel, asphalt, or other material. Containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage containers for purposes of this part.



Permanently Closed

Any container or facility for which:

- (1) All liquid and sludge has been removed from each container and connecting line; and
- (2) All connecting lines and piping have been disconnected from the container and blanked off, all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is a permanently closed container and noting the date of closure.

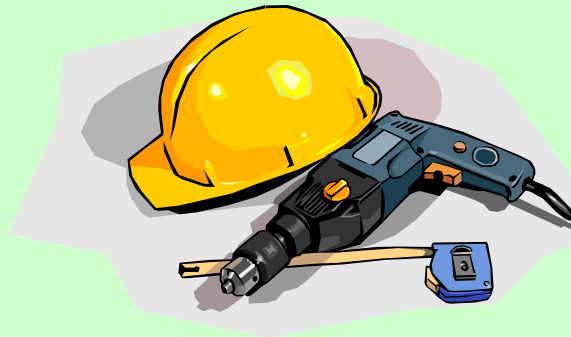


Alteration

Any work on a container involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of the container.

Repair

Any work necessary to maintain or restore a container to a condition suitable for safe operation, other than that necessary for ordinary, day-to-day maintenance to maintain the functional integrity of the container and that does not weaken the container.



Spill Prevention, Control, and Countermeasure Plan; SPCC Plan, or Plan

The document required by §112.3 that details the equipment, workforce, procedures, and steps to prevent, control, and provide adequate countermeasures to a discharge.



Section 112.3 Requirement to Prepare and Implement a SPCC Plan

Timeframes for preparation and implementation.

Must maintain copy of Plan at facility if attended **4** or more hours per day.

Mobile Facilities



- General plan
- Implemented prior to operation
- When facility moved installed according to plan
- Cannot operate mobile facility without implementing the plan
- Plan applicable only when in a non-transportation mode

Professional Engineer (PE)

Certified by a licensed PE

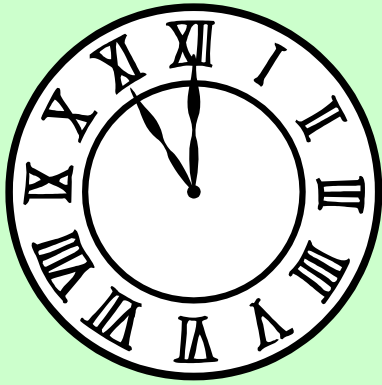
- Licensed in any state
- PE familiar with 40 CFR Part 112
- PE or agent visited facility
- In accordance with good engineering practices
 - Applicable industry standards
 - In compliance with regulations
- Inspection and testing procedures are established
- Plan is adequate for facility



Owner or Operators



- **PE certification in no way relieves the owner or operator of a facility of his duty to prepare and fully implement such Plan in accordance with the requirements of this part.**
- **The owner or operator must:**
 - **Maintain the facility according to the Plan**

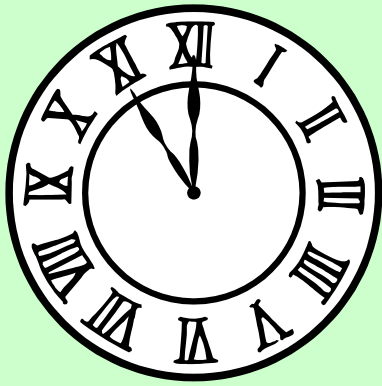


Timeframes

Section 112.3

- If a facility was operating prior to August 16, 2002, then the owner or operator must amend the SPCC Plan on or before August 17, 2004 and must implement the amended Plan as soon as possible, but not later than February 18, 2005.

- new timeframes due to extension finalized April 17, 2003.



Timeframes

- If a facility begins operations after August 16, 2002 through **February 18, 2005**, then the owner or operator must prepare a Plan on or before **February 18, 2005**, and fully implement it as soon as possible, but not later than **February 18, 2005**.
- If a facility begins operations after **February 18, 2005**, then the owner or operator must prepare and implement a Plan before beginning operations.



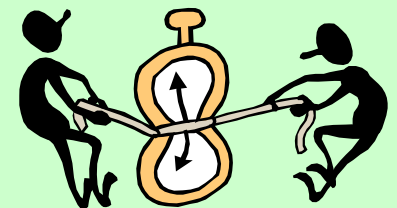
Extension of Time



Section 112.3(f)



- The Regional Administrator may authorize an extension when he finds that the owner or operator of a facility ... cannot fully comply with the requirements **as a result of either non-availability of qualified personnel, or delays in construction or equipment delivery beyond the control and without the fault of such owner or operator or his agents or employees.**





Extension of Time

- The submission of a written extension request does not relieve obligation to comply with the rule.
- EPA may request a copy of the current SPCC Plan to evaluate the extension request.
- IF EPA authorizes an extension of time for particular equipment or other specific aspects of the Plan does not affect your obligation to comply with the requirements related to other equipment or other specific aspects of the Plan which EPA has not expressly authorized an extension.



Section 112.4 Amendment of SPCC Plan by Regional Administrator



If you are the owner or operator of a facility

Which has:

- Discharged more than 1,000 U.S. gallons of oil in a single discharge,
- Discharged more than 42 U.S. gallons of oil in each of two discharges, within any twelve month period,

Then you must:

- Submit information to EPA and the appropriate State Agency within 60 days;

Section 112.5 Amendment of SPCC Plan by Owner/Operator

Amend the SPCC Plan for your facility ... when there is a change in the facility design, construction, operation, or maintenance that **materially affects its potential for a discharge**

(Examples: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at a facility.)

Section 112.5 Amendment of SPCC Plan by Owner/Operator

- **Amendment must be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment.**

Section 12.5 Amendment of SPCC Plan by Owner/Operator

- **A review and evaluation of the SPCC Plan at least once every five years from the date facility becomes subject.**
- **Professional Engineer must certify any technical amendments.**

Section 12.5 Amendment of SPCC Plan by Owner/Operator

- **Document the review and evaluation**
 - **Must sign a statement as to whether you will amend the Plan**
 - **at beginning or end of Plan;**
 - **in a log; or**
 - **an appendix to the Plan.**
- “I have completed review and evaluation of the SPCC Plan for (facility name) on (date), and will (will not) amend the Plan as a result.”**

Section 112.7 General SPCC Requirements

- **Prepare a Plan in Accordance with Good Engineering Practices**
- **Full approval of management**
 - authority to commit the necessary resources
 - signed statement
- **Written Plan**
 - Sequence of Section 112.7
 - If the sequence different
 - a cross-reference section
- **Additional facilities or procedures, methods, or equipment not yet fully operational, discuss in separate paragraphs, the details of installation and operational start-up.**

General SPCC Requirements

- (a) The Plan must also include a complete discussion of the facility's conformance with the applicable requirements of Part 112 and must comply with all applicable requirements.

The Plan may deviate from certain requirements if equivalent environmental protection by some other means of spill prevention, control, or countermeasure is provided, and the reasons nonconformance and the alternate methods to be used are described in detail in the Plan, as well as how they will achieve equivalent environmental protection.

General SPCC Requirements

(a)(3) Description of the physical layout of the facility and a diagram:

- location and contents of each container;
- the location of any completely buried storage tanks that are otherwise exempted from the SPCC regulation; and
- all transfer (loading and unloading) stations and connecting piping.

General SPCC Requirements

Type of oil in each container and its storage capacity;

Discharge prevention measures and procedures for routine handling of products (loading/unloading, and facility transfers, etc.);

Discharge or drainage controls such as secondary containment around containers; and

Other structures, equipment, and procedures for control of a discharge.

General SPCC Requirements

- **Discuss:**
 - countermeasures for discharge discovery,
 - response, and cleanup, both the facility's capability and those that might be required of a contractor, and
 - methods of disposal of recovered materials in accordance with applicable legal requirements.

General SPCC Requirements

Organize portions of the Plan describing procedures the facility will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices to the Plan.

General SPCC Requirements

- **Include a contact list and phone numbers for:**
 - **Response coordinator for the facility;**
 - **National Response Center;**
 - **Cleanup contractors with whom the facility has an agreement for response; and**
 - **all appropriate Federal, State, and local agencies.**

General SPCC Requirements

- **Provide information and procedures to enable a person reporting a discharge to relate information on:**
 - The exact address or location and phone number of the facility;
 - The date and time of the discharge;
 - The type of material discharged;
 - Estimates of the total quantity discharged;
 - Estimates of the quantity discharged that may be harmful;
 - The source of the discharge;
 - A description of all affected media;

General SPCC Requirements

- **Provide information and procedures to enable a person reporting a discharge to relate information on: (cont.)**
 - **The cause of the discharge;**
 - **Any damages or injuries caused by the**
 - **Actions being used to stop, remove, and mitigate the effects of the discharge;**
 - **Whether an evacuation may be needed; and**
 - **The names of individuals and/or organizations who have also been contacted.**

General SPCC Requirements

Spill Prediction:

Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge),

Include a prediction of the direction, rate of flow, and total quantity of oil that could be discharged from the facility as a result of each type of major equipment failure.

General SPCC Requirements

Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in Sec. 112.1(b).

The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs.

General SPCC Requirements

At a minimum, you must use one of the following prevention systems or its equivalent:

- Dikes, berms, or retaining walls contain oil;
- Curbing;
- Culverting, gutters, or other drainage systems;
- Weirs, booms, or other barriers;
- Spill diversion ponds;
- Retention ponds; or
- Sorbent materials.

General SPCC Requirements

Contingency Plan Option

If the facility determines that the installation of the structures or pieces of equipment listed as acceptable means for providing secondary containment for storage containers and facility tank car and tank truck loading/unloading areas to prevent a discharge as described in 112.1(b) are not practicable, the facility must explain in the Plan why such measures are not practicable;

for bulk storage containers: conduct both periodic integrity and leak testing of the valves and piping; and

provide a written commitment of manpower, equipment, and materials to control and remove any harmful quantity of oil discharged.

General SPCC Requirements

(e) Inspections, Tests, and Records

Conduct inspections and tests in accordance with written procedures developed by the facility or by the engineer who certifies the facility Plan.

Keep these written procedures and a record of inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years.

Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this requirement.

General SPCC Requirements

(f) Personnel, Training, and Discharge Prevention Procedures

(1) Train facility **oil-handling** personnel in:

the operation and maintenance of equipment
response procedures
applicable pollution control laws, rules, and
general facility operations; and
contents of the facility SPCC Plan.

(2) Designate a person accountable for discharge prevention

(3) Schedule and conduct discharge prevention briefings for facility oil-handling personnel at least once a year

General SPCC Requirements

(g) Security (excluding oil production)

(1) Fully fence and lock entrance gates;



General SPCC Requirements

(g) Security (excluding oil production)

- (2) Ensure that the master flow and drain valves permitting direct outward flow of the container's contents to the surface have adequate security measures;



General SPCC Requirements

(g) Security (excluding oil production)

- (3) Lock starter controls and locate in an area accessible only to authorized personnel



Security

(g) Security (excluding oil production)

(4) Securely cap or blank-flange loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.



General SPCC Requirements

(g) Security

- (5) Provide facility lighting commensurate with the type and location of the facility that will assist in the:**
 - (i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and**
 - (i) Prevention of discharges occurring through acts of vandalism.**

General SPCC Requirements

112.7(h) Facility Tank Car/Truck Loading/Unloading

(1) Drainage into a catchment basin or treatment facility designed to handle discharges, or

A quick drainage system

Designed to hold at least the maximum capacity of the largest single compartment of a tank car or tank truck loaded or unloaded at the facility.




NO
UNLOADING
OF ANY
HYDROCARBONS
TO THE SUMP

General SPCC Requirements

112.7(h) Loading/Unloading

- (2) Interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle brake interlock system to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.
- (3) Inspect for discharges the lowermost drain and all outlets of such vehicles



PRODUCT LINES MUST
BE CLOSED DURING
DELIVERY. DISCONNECT
HOSE BEFORE LEAVING

General SPCC Requirements

112.7(i) Brittle Fracture

If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

General SPCC Requirements

- 112.7(j) In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in Part 112 or any applicable more stringent State rules, regulations, and guidelines.

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

- (a) Meet the general requirements for the Plan listed under 112.7, and the specific discharge prevention and containment procedures listed in this section.**

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (b) and 112.12(b) Facility Drainage

Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. or

**By pumps or ejectors;
manually activated
inspect the condition of the accumulation**

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (b) and 112.12(b) Facility Drainage

Use valves of manual, open-and-closed design, for the drainage of diked areas. You may **not** use flapper-type drain valves to drain diked areas.

If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater as provided in (c)(3).



Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (b) and 112.12(b) Facility Drainage

Drainage from undiked areas

**Flow into ponds, lagoons or
catchment basins**

**Must not be located in areas subject
to periodic flooding.**



Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (b) and 112.12(b) Facility Drainage

- (4) Equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.**

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (b) and 112.12(b) Facility Drainage

- (5) Provide two “lift” pumps and permanently install at least one of the pumps.**

Whatever techniques are used, the facility drainage system must be engineered to prevent a discharge as described in 112.1(b) in case there is an equipment failure or human error at the facility.

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

- (1) Material and construction are compatible with the material stored and conditions of storage
- (2) Secondary containment for the **entire capacity of the largest single container** and sufficient freeboard to contain precipitation. The facility must ensure that diked areas are sufficiently impervious to contain discharged oil.

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

An alternative system may also be used, consisting of a drainage trench enclosure that must be arranged so that so that any discharge will terminate and be safely contained in a facility catchment basin or holding pond.

Sections 112.8 and 112.12

SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

- (3) NOT allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility system unless;**
 - (i) The bypass valve is normally kept sealed closed;**
 - (ii) The retained rainwater is inspected to ensure that its presence will not cause a discharge as described in 112.1(b)**
 - (iii) The bypass valve is opened and resealed following drainage under responsible supervision;**
 - (iv) Adequate records are kept of such events.**

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

- (4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions.**

The facility must regularly leak test such completely buried metallic storage tanks.

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8(c) and 112.12(c) Bulk Storage Containers

- (5) NOT use partially buried or bunkered metallic tanks for the storage of oil, unless the buried section of the tank is protected from corrosion by coatings or cathodic protection compatible with local soil conditions.**

Sections 112.8 and 112.12

SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

- (6) Test for integrity on a regular schedule, and whenever material repairs are made.

Visual inspection **AND**

Another testing technique

(such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing).

Comparison records of such testing must be kept.

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

Supports and foundations must also be inspected,

Outside of the container must frequently be inspected for signs of deterioration, discharges, or accumulation of oil inside diked areas.

Records of inspections and tests kept under usual and customary business practices

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

- (7) Monitoring the steam return or exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.**

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges.

(I) High liquid level alarms

(ii) High liquid level pump cutoff devices

**(iii) Direct audible or code signal
communication between the gauger**

and

the pumping station.

Sections 112.8 and 112.12

SPCC requirements for onshore non-production

(8) (cont.)

- (iv) Fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges.**

Liquid level sensing devices must be tested regularly to ensure their proper operation.

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

(9) Observe effluent treatment facilities frequently enough to detect possible system upsets

(10) Promptly correct visible discharges

Promptly remove any accumulations of oil in diked areas.

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8 (c) and 112.12(c) Bulk Storage Containers

- (11) Position or locate mobile or portable oil storage containers to prevent a discharge**

Furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

Sections 112.8 and 112.12

SPCC requirements for onshore non-production

112.8(d) and 112.12(d) Transfer, Pumping, and Process Operations

- (1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating.**

Must also be cathodically protected or satisfy the corrosion protection standards for piping in Part 280 or 281.

If a section of buried line is exposed for any reason, it must be carefully inspected for deterioration. Corrective action as indicated by the magnitude of the damage.



Sections 112.8 and 112.12

SPCC requirements for onshore non-production

112.8(d) and 112.12(d) Transfer, Pumping, and Process Operations

- (2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.**
- (3) Design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.**





Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8(d) and 112.12(d) Transfer, Pumping, and Process Operations

- (4) Regularly inspect all aboveground valves, piping, and appurtenances.**

The inspection must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces.

Integrity and leak testing of buried piping must be conducted at the time of installation, modification, construction, relocation, or replacement.

Sections 112.8 and 112.12 SPCC requirements for onshore non-production

112.8(d) and 112.12(d) Transfer, Pumping, and Process Operations

- (5) Warn all vehicles entering the facility
sure that no vehicle will endanger
aboveground piping or other oil transfer
operations.**

EPA Web Sites



www.epa.gov/oilspill

[www.epa.gov/region6/
oilspill](http://www.epa.gov/region6/oilspill)

EPA Hotlines

- National Response Center (NRC): 800-424-8802



- For SPCC, FRP, & OPA Information: 800-424-9346
- NCP Product Schedule Information: 202-260-2342



Region 6 Contacts



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